

Remarks

The Final Office Action mailed February 10, 2004 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-28 are pending in this application. Claim 1 stands rejected. Claims 2-12 stand objected to. Claims 13-28 are allowed.

The rejection of Claim 1 under 35 U.S.C. § 102(a) as being anticipated by Vallot (U.S. Patent No. 6,498,996) is respectfully traversed.

Vallot describes a mechanism to compensate for vibration-induced bias errors affecting inertial sensors and a method of compensating for changes in vibration environments that affect such sensors. (column 2, lines 6-9). At column 3, lines 35-45, Vallot describes providing power spectral density estimates to a compensation module which utilizes calibration coefficients to provide vibration-induced bias estimates which are added to sensor outputs to provide a compensated output. The sensors described include gyroscopes and accelerometers. At Column 4, lines 15-33, the coefficients are determined for a small number of sensors at a frequency range where the sensors are affected significantly. The determined coefficients are then utilized as coefficients for other sensors within that particular family of sensors.

While Vallot describes a vibration compensation method including determination of calibration coefficients for sensors subjected to vibration at various frequencies, Vallot does not describe nor suggest a method which includes estimating bias accumulation from accelerometer outputs measured during an acceleration cycle and determining a corrected accelerometer output based upon an estimation of bias accumulation.

Independent Claim 1 recites a method for determining compensation coefficients for accelerometers. The method comprises "estimating bias accumulation from accelerometer outputs measured during an acceleration cycle," "determining a corrected accelerometer output

based on the bias accumulation estimate" and "determining the compensation coefficients using the corrected accelerometer output."

Again, Vallot does not describe nor suggest a method which includes estimating bias accumulation from accelerometer outputs measured during an acceleration cycle and determining a corrected accelerometer output based upon an estimation of bias accumulation. For these reasons, Claim 1 is submitted to be patentable over Vallot, and Applicant respectfully requests that the Section 102 rejection of Claim 1 be withdrawn.

The objection to Claims 2-12 is respectfully traversed. Claims 2-12 depend, directly or indirectly, from independent Claim 1 which is herein submitted to be patentable. For the reasons set forth above, Applicant requests that the objection to Claims 2-12 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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